

## EG&G ROCKY FLATS

EG&G ROCKY FLATS, INC.

ROCKY FLATS PLANT, P.O. BOX 464, GOLDEN, COLORADO 80402-0464 • (303) 966-7000

April 7, 1993

A. H. Pauole  
Acting Manager  
DOE, RFO

Attn: M. S. Karol

DISPOSITION OF WASTEWATER COLLECTED IN BUILDING 559 DEWATERING SUMP - JQZ-134-93

Over the past weeks, a number of alternatives for disposal of water from the Building 559 foundation dewatering sump have been evaluated technically and in accordance with the Resource, Conservation and Recovery Act (RCRA) and Clean Water Act (CWA) regulations. EG&G Rocky Flats, Inc. has recommended and continues to recommend that management of the foundation water by treatment at the Rocky Flats Plant Sewage Treatment Plant (STP) is the best option from a technical and regulatory standpoint. The STP option provides suitable treatment and the least environmental insult of the options available and is supported by provisions of the RCRA and CWA regulations.

The alternative treatment options evaluated were the Operable Unit 1 (OU1) Treatment Unit which utilizes an ultraviolet-peroxide treatment process; OU2 Treatment Unit which utilizes a granular activated carbon (GAC) removal process; Building 374 Evaporator; and the STP. The OU1 and Building 374 options provide volatilization of the contaminants to the air, not treatment or destruction. Likewise, OU2 transfers the organic contaminants in the wastewater to the GAC, which then must be handled as a waste until treated or disposed. The STP, based on technical information provided by the U. S. Environmental Protection Agency (EPA), provides biological treatment of carbon tetrachloride and other organics detected in the subject water.

The recommended alternative of discharging the subject water to the STP has a number of advantages:

- (1) The contaminants are compatible with treatment capabilities at the STP;
- (2) Activated sludge and anaerobic treatment can provide up to 98% removal of carbon tetrachloride;
- (3) The contaminants are converted to innocuous carbon dioxide instead of transferred to another medium creating yet another waste;
- (4) There is no costly storage and transportation;
- (5) The STP is equipped with real-time monitoring equipment to protect against harmful influents;
- (6) There is no competition for treatment capacity as at the OU1, OU2, and Building 374 units; and

CLASSIFICATION:

UCNI	X	X
UNCLASSIFIED	X	X
CONFIDENTIAL		
SECRET		

AUTHORIZED CLASSIFIER  
 SIGNATURE

DATE 4/7/93

REPLY TO RFP CC NO:

ITEM STATUS

☒ OPEN ☐ CLOSED

0 ✓ PARTIAL 1/5

APPROVALS:

9115  
RIG & TYPIST INITIALS

7. *Aspergillus*

15

## ADMIN RECORD

REVIEWED FOR CLASSIFICATION/UCNI

By Sea Duran Luna

Date 8-11-93


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- (7) Treatment of this type of water at OU1 or OU2 under the Environmental Restoration Interagency Agreement (IAG) could set an undesirable precedent for the entire plant-site. This precedent could result in other similar incidental waters having to be remediated under the IAG, which would result in large, long-term cost increases for handling water that is not harmful to human health or the environment.

On the other hand, disposal at the STP carries the potential to volatilize some of the organics, although the releases would be minimal, and sump discharges may require increased monitoring to ensure organic thresholds are maintained to assure treatment and to prevent disruption of the biological treatment processes at STP. There is also the perception that this alternative provides dilution rather than treatment. While it is true that dilution will occur, it is also true that EPA has demonstrated treatability of these organic constituents at the concentrations expected to occur at the entrance to the STP.

Enclosed is the draft letter to the Colorado Department of Health (CDH) which provides our position on our regulatory analysis pertaining to the subject water. This enclosure is provided pursuant to a meeting between representatives of the Department of Energy, Rocky Flats Office (DOE, RFO) and EG&G Rocky Flats, Inc. on April 5, 1993. Upon CDH concurrence with this assessment, we recommend that DOE, RFO notify the U. S. Environmental Protection Agency (EPA) pursuant to the existing NPDES Permit prior to discharging the subject water to the STP. A draft notification letter to EPA is enclosed.

If you have any questions or comments regarding this issue, please contact David Ward at extension 5938 or Kirk Ticknor at extension 6344.

  
J. O. Zane  
General Manager

KWT:kam

Orig. and 1 cc - A. H. Pauole

Enclosures:  
As Stated